



EMRO

Eastern Mediterranean Region

REGIONAL GUIDE



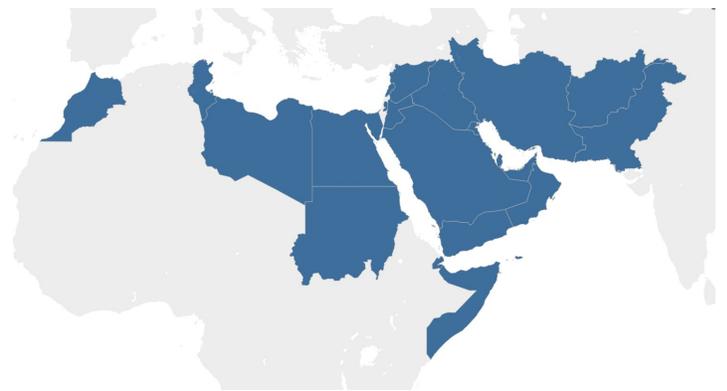
2023 AMWHO INTERNATIONAL CONFERENCE
PLANETARY HEALTH AND THE HUMAN CONDITION

INTRODUCTION

The World Health Organization's (WHO) Eastern Mediterranean Region (EMRO) consists of 21 member countries and Israeli-occupied Palestinian territory (East Jerusalem).¹ Collectively, these member states span the Middle East, North Africa, and Western Asia (see Figure 1 below). The EMRO Region as a whole is populated by less than 745 million people, making it the least populous of WHO's six regional offices.² Despite this number, many troubles remain. Almost 30 million individuals originally from EMRO member states and territories are currently displaced- a figure representing more than half of the globe's displaced population.² More children in the EMRO region experience malnutrition as a result of violence than any other region.² Members of this region experience a range of public health issues, many of which are driven by incidents of climate change such as drought, flooding, and facilitated zoonotic disease transmission. Today, tumultuous living conditions can largely be attributed to the expenses of international conflict and warring factions.

A decade after the Arab Spring of 2011, a polarizing movement once directed at fanning the Middle Eastern agenda towards a more positive future, social conflicts have exploded, resulting in a striking deterioration of public health systems. Environmental injustices that burden livelihoods have festered under strict regimes. For instance, droughts in Iran have widespread generated civil unrest against the Islamic Republic's rule, with public fears pronged on untoward policies against ethnic and religious minorities. In what was once the cradle of the three Abrahamic faiths, ethnic and religious minorities have experienced unprecedented health issues as a direct consequence of state-driven upheaval and displacement.

Today, the EMRO region is collectively regarded as one of the most tumultuous in the world, with many conflicts locked in stalemate as a result of international powers pawing for resources and influence. In this guide, challenges related to the theme of planetary health are provided with suggestions that EMRO states and international organizations can employ to strive for political, economic, and environmental stability.



CLEAN TECHNOLOGY AND GEOPOLITICS

The sourcing, development, and distribution of technologies in the EMRO region has vast ripple effects on the economic and environmental conditions of other countries. As the region is naturally disposed with a large portion of the world's energy resources, EMRO states seek to employ these assets to their advantage. The sourcing and formation of clean technology in the EMRO region has led to various international and intranational consequences of growing dependence. Furthermore, monopolizing these energy resources has definitive impacts on countries' socioeconomic and political structures.

CASE STUDY: MOROCCO'S CONTENTIOUS CLAIM ON PHOSPHATE RESERVES

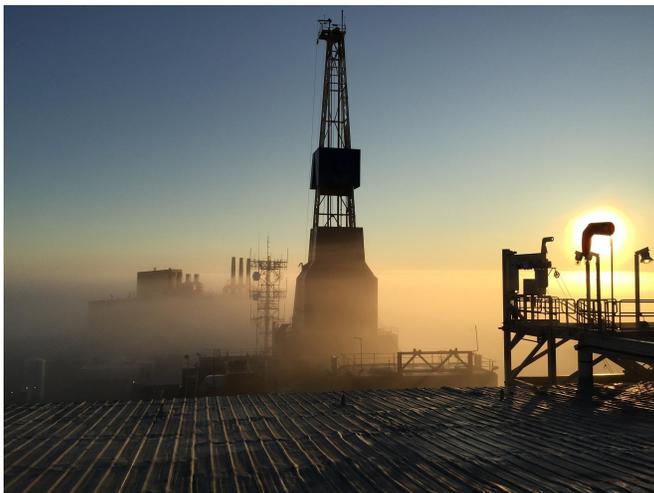
The North African nation of Morocco leverages control of an estimated seventy-five percent of the globe's known phosphate reserves.³ Since the discovery of phosphate's efficacy as a synthetic fertilizer, the compound has been incorporated into a wide range of agricultural products. Today, phosphate extraction underpins the world's food supply, and its application is expanding in engineering with inventions such as lithium iron phosphate batteries (LFP). With approximately 48 million tons of the mineral consumed annually, and no current method to artificially produce phosphate, Morocco possesses enormous power as the "gatekeeper of the world's supply".^{4,5} However, as many of these reserves lie beneath the Moroccan-occupied Western Sahara, extraction by the federal government has spurred turmoil amongst indigenous groups, and ethics of phosphate extraction have put geopolitical tensions at an all-time high.

Since the UN ordered a decolonization of the Spanish-occupied Western Sahara territory in 1965, its jurisdiction trickled down to Morocco and became challenged by the Polisario Front, an indigenous Sahrawi independence movement backed by Algeria. The rise of this dissenting group led to a 16-year guerilla war with Moroccan forces, which subsided after a UN-negotiated cease-fire in 1991. Although MINURSO (United Nations Mission for the Referendum in Western Sahara) was established to lay the groundwork for a sovereignty-determining referendum, Morocco has stalled all efforts to hold one.⁶

Today, Morocco aggressively ignores and frequently retaliates against notions of Western Sahara statehood in its effort to maintain its grip on phosphate. The OCP (Office Cherifién des Phosphates), Morocco's chief state-owned phosphate miner, phosphoric acid manufacturer, and fertilizer producer, operates the Bou Craa mine in the territory. Although a minority (ten percent) of Morocco's phosphate deposits are nestled in Western Saharan territory, this portion alone constitutes five billion metric tons of phosphate, which could make the Western Sahara the world's second-largest exporter of the compound.⁵ However, figures of revenue from the Bou Craa site remains inexact, as Moroccan officials refuse to share yearly reports with the Saharawi. Despite pressing Saharawi demand, King Mohammed VI of Morocco has vocalized his intention to continue exploiting the material, aiming to increase phosphate mining investment tenfold by 2030.⁸

Today, Moroccan phosphate provides a more necessary backbone than ever for developing African economies, with 264 million people in Sub-Saharan Africa alone suffering from malnourishment.⁵ In 2020, OCP possessed a fifty-four percent market share of fertilizer exports to the continent, with subsidiaries in twelve African countries.⁷ This demand for Moroccan phosphate is projected to skyrocket in the future. According to Stuart White, the director of the Institute for Sustainable Futures at the University of Technology Sydney, Africa is a "sleeping giant in terms of demand for phosphorus" as meat-based diets become increasingly prevalent.⁵ Unfortunately, phosphate is an incredibly finite resource, and experts estimate that Morocco and the Western Sahara will run out of reserves between 2025 and 2086 if production trends continue.³

Conflict with Saharawi people has led nations to unsubscribe from phosphate trade with Morocco, stalling advancement in other sectors leading to sustainability. In 2020, Germany backed out of a trade deal in Rabat to develop two green hydrogen energy projects; ironically, this came at a time when Tesla pledged to incorporate phosphate-powered LFP batteries into all standard range vehicles.⁹ Though phosphate can be used to fuel cleaner vehicle batteries, the compound itself poses a substantial hazard to the environment. Besides from the damaging effects of open-pit mining, which include deforestation and possible contamination of toxic materials into water sources, high phosphorus levels in fertilizer can lead to devastating rates of eutrophication. Algal blooms, which plummet oxygen levels in bodies of water, lower the viability of aquatic species. In turn, entire ecosystems may degrade, and the local livelihoods become far more distressed.¹⁰ Although expanding mineral-based fertilizer application increases crop yields, many African countries risk exacerbating environmental injustices. In addition, excess phosphate consumption be toxic, with symptoms such as diarrhea and calcification of the body's organs and tissues.¹¹ From a climatic standpoint, it is worth consideration that nitrous oxide, a powerful green house gas, is often produced by synthetic fertilizers with phosphate ingredients.¹²



Overall, the scramble to feed the globe and the developing applicability of phosphate have gravely shifted international perception of the dispute between Morocco and the Saharawi. As nations continue to pose demand for Moroccan phosphate, decades of colonial tension by shifting parties could implode. The Polisario have once again stated that they are willing to raise arms, should the Moroccan government undermine their claim. In order to prevent further conflict, the UN must pressure the Moroccan government to enact an inclusive referendum determining the future of the Western Sahara's statehood.

CASE STUDY 2: SAUDI ARABIA'S INTENTIONS ON SHIFTING TOWARDS CLEAN ENERGY

Saudi Arabia, known for being one of the top oil contenders in the world, is now in the race to shift towards being one of the biggest producers of clean technology. This newfound interest in renewable energy and technology is geared towards achieving their goal of becoming the heart of electricity production and export in the world. Saudi Arabia has already demonstrated the economic power they hold, as they are dictating the global economy and controlling its political relations by owning the most profitable oil company in the global economy. Saudi Arabia's shift to renewable energy is not for the concern of global warming, but rather to continue to hold global power in the oil industry.¹³ As an increasing number of countries begin to convert over to clean technology, Saudi Arabia's hold on the global oil economy becomes more solidified and such profitability enforces Saudi Arabia's support towards clean technology.

Currently, Saudi Arabia is working towards this shift through its newly constructed Vision 2030, this historic vision aims to rebuild their nation with the focus being on a vibrant society and thriving economy.¹⁴

The Saudi government's objective is to generate fifty percent of the country's electricity from solar power and the other fifty percent from gas.¹⁵ This radical change is occurring as Saudi Arabia currently burns a quarter of the crude oil from their crude own oil production, and this consumption rate is three times the size of Saudi's current population, resulting in excessive usage.¹⁶ Saudi Arabia's increase in the consumption of oil threatens the kingdom's title of being the top oil contender, and their domestic consumption was reported to eat into their own oil exports.¹⁶ To maintain their control over their own country and still have a hold on the world economy, they directly need to reduce their oil consumption.

Saudi Arabia has decided to redirect and focus all of Saudi's resources on green energy, mostly on a solar alternative, as they belong to a desert biome and have the most extreme sunlight, providing them with the conditions to construct solar panels.¹⁶ The kingdom does not only plan to distribute panels within just their country, but also to their current trading partners, such as the United States.¹⁶ Chief commercial officer of solar panel Manufacturer Desert Technologies, like Majid Al-Refae, is one of the producers who state the mission is to export solar panels all over the globe.

Exporting solar cells will grow the country's Gross Domestic Product.¹⁶ As there are high demands for solar products, Majid claims Saudi Arabia will be able to meet these demands as they are creating incentives for companies to implement green strategies and build new products and technologies. These incentives include exemption from customs, provision of land for labor, residence, or factory use at a reduced cost, and exemption of taxes on local products. Companies could receive these benefits by applying for the industrial license offered through the Ministry of Energy.¹⁷

These new advances offer Saudi a leg up in both the clean energy initiative and allow them to continue its oil production. This will lead the kingdom to monopolize both energy sources. Leading Saudi Arabia to gain a higher political power in foreign affairs through being the biggest energy supplier.

However, these new advances might create political instability in Saudi Arabia as their new practices are impacting the Saudi people. This vision of clean energy has impacted Saudi Arabia's own societal conditions as Vision 2030 is helping grow private sectors and cutting down on public ones, which include privatizing public services such as hospitals and schools.¹⁸ Along with this, they are scaling down on public sector employment and increasing taxes. They are also going to implement a five percent tax on goods and services, increase the prices of basic commodities and fuel.¹⁸ This hits middle and poor-income households extremely hard and leaves them unable to afford their daily necessities.

In the process of implementing their vision of clean energy, Saudi Arabia's policies have exacerbated existing issues faced by the Middle and poor-income households.^{19,20} With already high rates of morbidity due to malnutrition and unemployment, such policies implemented in order to achieve clean energy can harm a large portion of Saudi Arabia's population.²⁰

Vision 2030 was not created to protect lower-income households as it gives rise to private sectors, and only the upper and royal class will be able to maintain stability. Even within the private sector, labor protection is not offered, generating more exploitation and abuse of workers.¹⁸ The workers' health is being sacrificed due to unsanitary conditions, unfair treatment, and improper compensation.¹⁸

These huge rifts in society were alleviated through monetary handout and repression, which only suppressed the public for a fleeting time. But the increase in noncommunicable diseases continues. A long-term solution is still awaited to diminish socio-economic instability and break the spread of noncommunicable diseases. Action towards reform continues, but current strategies are resulting in increased poverty, inequality, injustice, and damaging health consequences.¹⁸



NATURAL DISASTERS AND EFFECTS OF DISPLACEMENT

Natural disasters are often the repercussions of global warming and climate change. The rise in global temperatures influences the intensity of catastrophic environmental events, generating events such as droughts, floods, storms, heat waves, and fires. The consequences of these disasters are suffered mostly by the underprivileged, specifically in the EMRO region, where several of the countries are under constant threat of natural disasters due to their geographical positions. These threats are aggravated due to unregulated and underdeveloped government policies and neglect of climate change. In this subtheme, the consequences these natural disasters have on the economy, displacement, health, and the local people will be uncovered.

CASE STUDY 1: NORTHERN PAKISTAN GOING UNDERWATER DEVASTATING MILLIONS

Pakistan, a multiethnic but predominantly Muslim country, has over fifteen major ethnic groups that are diverse in traditions, customs, and cultures. It is home to over 225 million people and is divided into four provinces: Sindh, Punjab, Khyber Pakhtunkhwa, and Balochistan. These provinces together are one of the world's top producers of rice, wheat, cotton, sugarcane, dates, and kinnow oranges.²¹ However, Pakistan, a developing country, is currently suffering one of the world's worst environmental disasters.

About one-third of Pakistan is underwater, over 1,325 people have died, and 33 million people (about twice the population of New York) have been stranded.²² Further to the previous report, the United States Institute of Peace has now confirmed that over 1,600 people have been injured, 325,000 homes are destroyed, 735,000 livestock are lost, and about 2 million acres of crops are damaged. These numbers are continuously increasing.²² Through an assessment conducted by Atlantic Council economists, the estimated direct damage costs to homes, livestock, crops, and local roads were over three billion dollars.²³

Flooding has occurred mostly in the northern regions of Sindh, Balochistan, and Khyber Pakhtunkhwa. Balochistan is one of the largest contributors to the production of natural gas, coal, and minerals, while Sindh and Khyber Pakhtunkhwa contribute economically through their agriculture.²¹ This natural disaster has impacted the economy severely, imposing food insecurity in Pakistan and a shortage of food supply in countries that rely on Pakistani agricultural exports.²⁵ Moreover, the United Nations stated, "tens of millions of people are now homeless and displaced throughout the regions".²⁶ Millions are now living in tents or along open roads, while others are staying with family and friends. Housing conditions are often cramped and unsanitary.

In addition, the floods have directly impacted over 650,000 pregnant women as their displacement has impacted their access to nutritious food, clean water, and safe shelter.²⁷ These women are primarily supported by health camps being run on limited funds as a result of the impact of the floods on clinical supplies and finances.²⁷

Pakistan has become accustomed to natural disasters, having dealt with an annual monsoon season. However, this year's flooding is the worst Pakistan has seen in years. The U.N. Secretary-General António Guterres stated, "The Pakistani people are facing a monsoon on steroids - the relentless impact of epochal levels of rain and flooding." He made an appeal for \$160 million in aid for the country.²⁴ Guterres released a warning stating, "Today it is Pakistan, tomorrow it could be your country," to compel the public to act before it results in a global calamity.²⁴

However, the question is how did Pakistan reach such a catastrophic state? Some suggest it is due to improper funding for climate-resilient infrastructure, and others suggest it was impossible for Pakistan to be prepared for the disaster. The reality of the situation is a combination of the climate crisis and the mishandling of policies.²²

A similar situation occurred in 2010, when there was severe flooding that overwhelmed Pakistan. Ibrahim Buriro, a native of the Sindh province, said, "The natives watched on as feudal elites and bad government planning interfered with the natural course of the region's waterways." He is evoking the Pakistani people to raise their voices to build effective dams and reconstruct policies that will provide resistance to climate change and aid its victims.²⁸

This disastrous flooding has significantly damaged the health of many and led to the demise of several. The flooding has spread water-borne diseases, skin infections, respiratory infections, and diarrheal diseases.²⁹ To maintain the health and safety of the public, the government needs to act, so Pakistanis from all regions can gain quality care. The government can do this through raising healthcare standards and taking care of climate change issues.²⁹

The current situation has occurred due to the ignorance of corporations and weak governance. Over the years, there has been improper regulation of upholding policies, illegal construction, and poor urban and rural planning which gave way to these disastrous effects.²² To combat these issues, proper regulation of policies and planning needs to be administered, illegal structures need to be demolished, and the needs of provinces vulnerable to climate change need to be prioritized. This should also be valued as an important lesson to other countries to step forward in combating climate change, advancing public health and reducing global warming.

CASE STUDY 2: IRANIAN EXODUS SPURRED BY DROUGHT AND CIVILIAN CONFLICT

The Middle Eastern nation of Iran has long been pinned at the heart of conflict, exhibiting a changing political structure, restrictions on public access to information, and a frightening surge of ethnic, religious, and human rights violence.³⁰ However, one particular factor that has exacerbated many of these issues and triggered a major shift in the country's social cohesion is the presence of an unprecedented dry spell that has left many of the citizens without a home. Neighboring countries to Iran, already burdened by weak infrastructure and political strife, have witnessed a dramatic influx of refugees.



Since 2021, the Southwest Asian country has suffered from catastrophic drought.³¹ Although the average yearly precipitation has demonstrated a significant downward trend over the last thirty years, the water season of 2021 indicated a historic low.³¹ As a whole, the country saw a forty percent reduction in precipitation. In the month of January alone, rainfall reached a forty-year record low of 9.8 inches.³¹ This drought placed insurmountable stress on Iran's underdeveloped infrastructure. As many of the country's crucial hydroelectric dams ran low (depleting by an average of forty-seven percent) and fires wreaked irreparable damage to the power grid, intermittent blackouts during the summer became a harsh reality for citizens.^{31,32} Several major cities, including the nation's capital, Tehran, were hit by days-long power outages. The government, pressured by demands for air conditioning to counter the stifling heat, reportedly requested and imported 200,000 generators from its neighbors Armenia, Azerbaijan, and Turkmenistan.³² The government additionally took extreme measures to limit energy consumption, including closing all government offices on Thursdays³².

As water quantities in underground reservoirs reached dangerously low levels, the government's failed attempts to transfer water from water-rich provinces to poorer ones exacerbated regional disparities and ignited further ethnic conflict that has left many individuals displaced. The Iranian Red Crescent Society (IRCS) predicts that nearly five million people, seventy percent of the rural population of the worst drought-affected provinces, suffer the brunt of drought-related consequences and are at risk of losing their homes.³ Furthermore, water dispersal was limited to one hour per day, leading to many riots, often spearheaded by farmers from Khuzestan and other drought-prone regions.³² These protests resulted in damage to government property and multiple casualties at the hands of Iranian officials, further deteriorating national cohesion and pushing people to migrate away from the violence.³²

In the decade leading up to the extreme drought conditions in 2021, Khuzestan frequently saw a net migration of more than 100,000 people per year. Of which, the majority were farmers.³³

Drought conditions have the potential to be mitigated, since they are primarily human-induced in Iran. Domestic water use tallies up to seventy percent above the global average.³⁴ An estimated ninety-three of water is used through the agriculture sector, which demonstrates wide scale, unsustainable methods of irrigation.^{34,35} Today, the Iranian Parliamentary Research Center estimates that two-thirds of the country has transformed into a desert, including areas previously used for animal husbandry and farming.³⁵ Lower-class farmers from minority backgrounds are unsurprisingly the hardest-hit stakeholders, with an estimated one million agricultural operators in Iran being of non-resident status.³⁶ As many farming villages have become waterlogged by the government in priority of wealthier urban areas, they have been pushed to the outskirts of cities.³⁵

These barriers to livelihoods in combination with other symptoms of a war-torn country have contributed to a mass exodus of Iranians, with more than 42,000 citizens resettling in Turkey over the past five years.³⁴ Experts approximate a nearly \$100 billion deficit in capital outflow, largely from the agriculture sector, during this time.³⁴ The previous Minister of Agriculture explained that if trends continue, the country could witness a diaspora of fifty million citizens— up to seventy percent of the Iranian population.³²

In order to improve the water crisis in Iran, the country must seek to improve its water expenditure and management. Livelihoods must be readopted by citizens in order to accommodate a changing climate. The Ministry of Energy, which largely controls water supply, is in the midst of implementing a plan to transport water from the Oman Sea as federal committees advocate social health and better living conditions in communities.³³ On an international scale, humanitarian organization of the UN including UNICEF, UNDP, and WFP must continue working in tandem with ministries to ensure adequate programming of projects that reinforce water conservation and access.

FAMINE AND FOOD INSECURITY

The EMRO region has witnessed major catastrophes in famine and food security, with systems facing high-strain from the consequences of strife and massive influxes of a hungry population that they are unable to support. In addition, as shifting weather patterns caused by global warming continue to disrupt supply chains, farmers are left without livelihoods and nations to ameliorate the hunger crisis beyond their borders. In this subtheme, the roles that failing economies and food insecurity have on the overall health of populations are broken down, while prevention and policies aimed at fostering upward growth are provided.

CASE STUDY 1: AFGHANISTAN IN CRISIS WITH GROWING FOOD INSECURITY

Long before Afghanistan became a war-torn country, it was renowned for its history, culture, agriculture, and poetry. It was a tribal society split into different regions with their own subcultures. Once home to eleven million people, Afghanistan now has a population of only 41,128,771³⁷. Afghanistan used to be one of many countries to dominate the agricultural and animal husbandry industry from 1970 until 1978, which was the last year of peace before devastation.³⁸

Afghanistan, having a long history of being dominated and having been part of the Cold War, had suffered from a severely damaged economy.³⁸ The majority of the country's profits came from their agricultural produce, animals, and crops. The country was never able to progress with new technology to a great extent due to geographical barriers, and war strains.³⁸ After Afghanistan became a battlefield, it suffered many casualties and economic losses, and was deprived of its own natural resources at the hands of exploitation. Due to environmental degradation caused by war and climate change, Afghanistan has been suffering from a long drought that started in 1999 and that still takes the country by force.³⁸

Afghanistan's instability in its economic structure and environmental vulnerability has resulted in famine. In 2017, Afghanistan's unemployment rate was at twenty-four percent and the country ranked 194th out of 218 countries in the world.³⁹ More than fifty-four percent of its current population falls under the poverty line.³² Adding to its war devastation, natural disasters such as localized floods, severe insect infestation, and dry spells also impede its growth.³⁹

Hunger and the current famine increased rates of childhood stunting due to malnutrition. According to Aryana Aid, an emergency aid initiative working in Afghanistan, the poverty in the country stems mostly from “food insecurity and the lack of a social security net” resulting in a significant stunt in the population growth.⁴⁰ More than forty-seven percent of the country's population suffers from childhood stunting, which causes poor cognition and a heightened risk of nutrition-related diseases in adulthood. Wasting is also another prevalent condition, in which an individual is considered extremely skinny for their height and weight. Wasting occurs when there is rapid weight loss or lack of weight gain.³⁹ Due to food scarcity, several low-income citizens also suffer from anemia, vitamin A deficiencies, and mineral deficiencies. These ongoing issues have resulted in the highest infant mortality rates in the world.³⁹ Another reason for food insecurity is the unequal distribution of food throughout the country. It is exported to heavy war zones, whereas the rest of the regions, do not gain any resources, creating a strain and adding to the problem of ongoing food insecurity.³⁹

Access to clean water is unstable, as most people living in either rural or urban areas do not have access. They have reservoirs that were constructed to collect potable water, but there are not enough reservoirs or previous reservoirs have been destroyed due to war.⁴¹ Further, due to the lack of canals, only thirty percent of water that comes out of the mountains is retained.⁴¹ A timely solution is not available, as it takes several years and significant funding to build new infrastructure. Moreover, workers refuse to work out of fear of being attacked, as the country is still in war conflict.⁴¹



The United Nations works toward stabilizing Afghanistan through humanitarian aid, however, most of the funds meant to support the relief mission in Afghanistan were halted due to the Taliban's takeover.⁴² The UN humanitarian chief urges donors to restore funding for the development of underdeveloped communities and to reduce poverty.⁴³ Afghanistan not only suffers from economic and climate crises but also humanitarian, hunger, and financial crises. Especially coming toward the colder months, it is vital to provide funding to relieve the poverty-stricken population. This responsibility falls on the de facto authorities whose part is to restore the Afghan people's needs, as bureaucratic interference, and procedures delay humanitarian assistance when it is vital to the survival of a whole country.⁴³

CASE STUDY 2: LEBANON FACING FAMINE AND FOOD INSECURITY AS A SIDE EFFECT OF REGIONAL STRIFE

Geographically positioned in the crossfire of warring regions, the Middle Eastern country of Lebanon has suffered dramatically from the after-effects of an unforeseen refugee influx, causing economic, political and social strain. Among these grave consequences, access to clean food and water has frighteningly diminished, in part due to climate change.

Lebanon has long struggled economically, relying majorly on exports to sustain a growing population, while its economy is limited by the burden of debt as a result of decades of inefficiency, waste, and corruption.⁴⁴ In 2019, GDP growth paused at zero percent, forcing the government to further borrow from outside entities.⁴⁴ Today, Lebanon's national debt exceeds 157 percent of the nation's total GDP, compounding to \$85 billion.⁴⁴ As of December 2021, fifty-seven percent of Lebanese families were identified as food insecure, a dramatic seventeen percent increase from the beginning of the Syrian refugee influx.⁴⁵ Research has shown that food insecurity can result in the delayed development of children, increased risk of chronic illness caused by deficiencies, as well as higher risk of behavior issues.⁴⁶ Furthermore, food insecurity and poor nutrition can lead to outcomes such as obesity, with less than forty percent of adult women and thirty percent of adult men classified as obese according to the 2022 Global Nutrition Report.⁴⁷

With an estimated Lebanese population of 5.9 million and now an additional 1.5 million refugees, Lebanon accepts more refugees per capita than any other country in the world.⁴⁸ Extreme poverty severely impacts these refugees' ability to purchase food and maintain basic health needs and puts strain on the food system. This surge in demand comes at a time when strife in Eastern Europe threatens to blow out food prices, as the nation currently imports fifty percent of its wheat stock from Ukraine.⁴⁸ Furthermore, Lebanon's depletion of water sources have become a topic of concern, provided unsteady climactic patterns as a result of global warming. Over the last decade, Lebanon exhibited nearly-historically low records of snow and rainfall.⁴⁹

Though Lebanon possesses the largest percentage of arable land with respect to neighboring Middle Eastern countries, decades of mismanagement of environmental resources have formed an erroneous agricultural system. In 2015, forty-eight percent of water harvested from dams was lost to leakage, further depleting agricultural output during the drought.⁴⁹ Coupled with the refugee crisis, the government was forced to tap into non-renewable groundwater sources.⁴⁹ Economic deterioration, food insecurity, and unstructured organization of natural resources are three major factors that have triggered a worrying cholera outbreak in Lebanon within the past year. In October 2022, WHO detected 381 cases of the illness, which has since spread to the majority of districts.⁵⁰ For more than three decades prior, cholera in Lebanon had been successfully eradicated.⁵⁰ Cholera, which can be contracted from unclean water and food, it can be fatal, but it is preventable through vaccinations, clean water, and sanitation.⁵⁰

In contrast to many other Middle Eastern countries, Lebanon is not single-handedly dominated by an authoritarian leader. Rather, multiple parties and leaders vie for control of sectarian groups. Parliamentary positions represent specific sects, such as the prime minister being a Sunni Muslim, the president being a Maronite Christian, and the speaker of parliament being a Shi'ite Muslim.⁴⁴ This enables politicians to put the values of their sect beyond the state. As a result, hunger has historically affected minority populations disproportionately.⁴⁴

The UN's World Food Program (WFP) is prioritizing crisis response and resilience-building approaches in its effort to ameliorate Lebanon's situation.⁴⁸ In refugee communities, the program has activated three cash modalities through the incorporation of an E-Card program.⁴⁸

Refugees are given the liberty to use their E-Cards to purchase sustenance at any of the WFP's-contracted stores, withdraw cash from ATMs to spend at food shops, or simply use on other items, offsetting their cost on foods.⁴⁸ This flexibility enables targeted populations to spend money where they see fit, such as items like clothing, shelter, and medication. The WFP has observed generally positive results through this program and intends to expand their impact from 1.8 million Lebanese and refugees to individuals to 2.3 million by the end of 2022.⁴⁸ In order to resolve major environmental threats, non-profit organizations and institutions must continue advocating for efficiency of Lebanon's agriculture and water systems. Furthermore, the Lebanese government must adopt changes to its constitution to prevent the structural discrimination of the most vulnerable in society.

CONCLUSION

The health of the planet and that of the inhabitants are mutually dependent upon one another. While current events in one part of the world may seem unrelated to happenings in another, the very livelihoods of global citizens are extremely interconnected. Many of the world's leading powers are reliant upon fossil fuels dealt by EMRO countries and form relations based heavily on exchange of this prized resource. More than eighty percent of marketable oil reserves exist in the Middle East.⁴⁹ Although EMRO nations are extremely susceptible to climate change, the region has tripled its greenhouse gas emissions in the last three decades, with Saudi Arabia and Iran namely becoming the 9th and 7th largest emitters of carbon dioxide gas.⁵⁰ As many countries in EMRO grapple with previously unfathomable turmoil, planetary health has often been pushed to the fringes of central discussion. However, increased negotiations with the prospect of peace and government-sponsored developments in cleaner energy and resources are imperative for carving out a more positive future for EMRO states.

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